REMARKS

Claims 1-7 are all the claims pending in the application.

The Examiner has rejected claims 1 and 4-5 under 35 U.S.C. § 103(a) as being unpatentable over Tiedemann, Jr. et al. in view of Crane. Applicant traverses these rejections for the following reasons. Regarding claim 1, the cited references fail to disclose all of the claim limitations and there is no suggestion or motivation that would have led one skilled in the art to modify the Tiedemann, Jr. et al. system to include the Crane feature of detecting residual battery power. Specifically, the cited references fail to disclose at least the following limitations:

Claim 1:

an input means for inputting said data transmission rate;

The Examiner asserts that Tiedemann, Jr. et al. discloses inputting a data transmission rate and cites col. 4, lines 14-20 and col. 6, lines 10-17, 19-22 for support. However, none of passages disclose a mobile terminal that has an input means for inputting a data transmission rate. The passages are shown below:

> In conventional reverse link implementations, frames of variable rate data are transmitted from a mobile station to a base station using transmission gating when the data of transmission frames is less than a predetermined maximum. FIGS. 2a-g illustrates an exemplary frame structure for a transmission gated communication link. FIG. 2a illustrates a frame of full rate data comprised of 16 unique power control groups (P_1 -P_{16}) of transmission data.
>
> When mobile station 50 detects a need to modify the transmission rate, control processor 58 in mobile station 50 sends a signal specifying a modified rate set to variable rate data source 60. The modified rate set is a set of rates at which data source 60 is permitted to source data. In response to the modified rate signal,

> variable rate data source 60 provides all data for transmissions within the modified rate set.
>
> Data source 60 may be a variable rate source that varies its transmission rate on a frame to frame basis throughout the transmission or it may be able to vary rates only upon command.

In addition, the Examiner concedes that Tiedemann, Jr. et al. fails to disclose detecting a residual amount of battery power. In order to make up for this deficiency, the Examiner cites to Crane. However, there is no motivation or suggestion that would have led one of skill in the art to combine the battery detection feature of Crane with Tiedemann, Jr. et al. Crane discloses a system for allowing a cell phone user to determine the battery power while minimizing use of power from the cell phone. Col. 2, lines 21-35. The system accomplishes this by only detecting battery power, instead of fully powering up the phone, when a key is pressed at the same time as the power key. Col. 2, lines 38-55. The battery power indication is provided so that the cell phone user can determine how long the phone will operate. There is no disclosure or suggestion of using the power indication to change how the phone operates.

Also the purpose of Tiedemann, Jr. et al. is to "provide timely power control that is necessary to provide robust communication link quality under fast fading conditions." Col. 2, lines 48-51. In other words, it discloses modifying the transmission rate based on the quality of the link. The amount of battery power in the mobile unit does not effect the quality of the link. Therefore, one skilled in the art would not have been motivated to add the Crane feature to the Tiedemann, Jr. et al. system.

Finally, an object of the present invention is to provide a mobile terminal which regulates a maximum data transmission amount, depending on a residual amount of battery power in order to suppress the power consumption. Page 3, lines 18-21. However, neither Tiedemann, Jr. et al. nor Crane disclose the correlation between a data transmission rate and a battery power. Therefore, even if Crane's features were added to the Tiedemann, Jr. et al. system it would require undue experimentation for one skilled in the art to arrive at the claimed invention.

Regarding claim 4, as explained above, there is no motivation or suggestion that would have led one of skill in the art to combine the battery detection feature of Crane with Tiedemann, Jr. et al.

Regarding claim 5, the cited references fail to disclose all of the claim limitations and there is no suggestion or motivation that would have led one skilled in the art to modify the Tiedemann, Jr. et al. system to include the Crane feature of detecting residual battery power. Specifically, the cited references fail to disclose at least the following limitations:

Claim 5:

> detecting a residual amount of battery power of said mobile terminal, when said data transmission rate is inputted into said mobile terminal;

The Examiner asserts that Tiedemann, Jr. et al. discloses detecting the transmission power of a mobile terminal when a data transmission rate is inputted into a mobile terminal and cites col. 8, lines 21-30 for support. However, the passage does not disclose a data transmission rate being inputted into a mobile terminal. The passage is shown below:

> Bits indicating the received power level are then combined with traffic data in encoder 34 and transmitted back to mobile station 50 as previously described. Mobile station 50 knows the data rate at which it transmitted and so power adjustments could be based on the knowledge of the transmission rate for the power control group corresponding to the feedback information as shown in Table 1. Table 1 illustrates a benefit to the multiple level implementation, which is that if the measured quality is much different than the desired level (possibly due to a sudden deep fade), a larger power adjustment can be made. In this implementation, 3 bits are needed to send back this 1-of-5 information. This increases the overhead on the feedback link.

In addition, as explained above, there is no motivation or suggestion that would have led one of skill in the art to combine the battery detection feature of Crane with Tiedemann, Jr. et al.

The Examiner has rejected claims 2-3 and 6-7 under 35 U.S.C. § 103(a) as being unpatentable over Tiedemann, Jr. et al. in view of Crane and Hayashi. Applicant traverses these rejections for the following reasons.

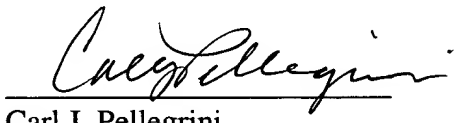
First, these claims should be allowable at least based on their dependence from claims 1, 4 and 5, for the reasons described above. In addition, regarding claims 2 and 6, the Examiner asserts that Hayashi teaches communication rate regulating on the basis of both a residual amount of battery power and electric field strength and cites the Abstract and col. 2, lines 1-5 for support. However, the passages do not support the Examiner's assertion. Hayashi does not regulate the transmission rate based on the residual battery power. It simply switches to a lower transmission rate if a battery is used instead of an external power source. There is no discussion of how much power is left on the battery.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the

Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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